

REMARKS

Rejection of claims 20, 22, and 23 under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 20 and 22-23 under 35 U.S.C. § 112, second paragraph. Claims 22 and 23 were rejected as lacking antecedent basis for a recitation of "the adjoining key," and a recitation of "its." Claim 20 was rejected as indefinite. Each of these claims has been amended as indicated above, and Applicant believes that the claims are now in condition for allowance.

Rejection of claim 19 under 35 U.S.C. § 102

The Examiner rejected claim 19 under 35 U.S.C. § 102(b) as being anticipated by Numakura Wakako (Japanese Patent No. 61-184031) (hereinafter "Numakura").

This rejection is incorrect for multiple reasons. First, Numakura is merely directed to "registering an extension number of a telephone set desired for callback when a called party is absent." Thus, when a user pushes the button of Numakura, an extension number is simply retrieved from local recorder 5 and shown on a display section 13. Pending claim 19, in contrast, recites a message indicator that indicates when a message is waiting, and has a key that causes transmission of a message retrieval signal. The pending application indicates that it is known to display the name and telephone number of a calling party on a visual display, which is not addressed by pending claim 19, *see* page 1, lines 21-25, and discusses separately the retrieval of actual messages, which is addressed by pending claim 19. While Numakura may be directed in some measure to the display of names and numbers ("registration," in the terms of Numakura), it is not directed to the message retrieval addressed by the pending specification and recited in the pending claim.

Second, the light in Numakura is merely "accessoried to" a message registration button. This does not mean that it is "attached" to the button, as the Office Action asserts, and Numakura certainly does not teach an "integration" of the light and the button. At most, Numakura indicates that the light is next to the button, as indicated by its figures, which shade the button and provide it with a label, but do not provide a label or shading to the lamp. The

Office Action also fails to indicate where Numakura discloses an *integrated* light and button, which provides benefits not provided by Numakura. In particular, the pending specification indicates why the provision of visible light from the message key itself, rather than from some area outside the message key, provides a "compact and intuitive user interface" that has many advantages, including particular advantages in low-light conditions where many telephone sets (including especially hotel telephones and cellular telephones) are used. *See* page 7, line 30 to page 8, line 32. Simply put, the arrangement in Numakura is merely the prior art arrangement where the lamp is not part of the button, which the pending specification discusses and distinguishes. Such an arrangement does not provide the benefits discussed in the application, and does not meet the limitations of claim 19.

Therefore, the Applicant respectfully submits that claim 19 is in condition for allowance.

Rejection of claim 20 under 35 U.S.C. § 102

The Examiner rejected claim 20 under 35 U.S.C. § 102(e) as being anticipated by Welch (U.S. Patent No. 5,938,772). Claim 20 has been amended to more particularly claim the invention. Claim 20, as amended, recites a telephone having an integrated message indicator light and message access key, along with a dialing keypad and a transceiver that provides access to a central voice messaging system. Welch simply discusses a personal computer having a button array, in which one of the buttons (button 280) relates to an electronic telephone answering machine ("TAM"). The system of Welch is complicated, and Welch discusses the interaction of the computer bus and processor with the various features controlled by each button. Because the computer is configured to enter a "sleep" mode, Welch also discloses numerous complicated hardware and algorithms for operating the system in the sleep mode. *See, e.g.,* Welch, Col. 8, line 41 to Col. 9, line 45. Pending claim 20, in contrast, simply recites a telephone—not a complicated computer. As explained in the pending specification, the invention can be implemented, for example, in a basic hotel telephone. The complicated computer of Welch simply does not teach or suggest implementation using a telephone. In addition, claim 20 as amended explicitly recites other features of the telephone, such as a dialing keypad and transceiver, which are not disclosed or suggested anywhere in Welch.

In addition, claim 20 as amended recites that the telephone transceiver provides audible access to messages on a central voice messaging system that is located remotely from the telephone. In contrast, the TAM of Welch is located right on the personal computer. Again, this local TAM storage (and the attendant functionality required to make it work) requires a more complex system than the simple telephone that is recited in claim 20. And again, Welch does not teach or even suggest this requirement of claim 20. For each of these reasons, the Applicant respectfully submits that claim 20 is in condition for allowance.

Rejection of claims 1, 5-8, 12-14, 18, and 21 under 35 U.S.C. § 103

The Examiner rejected claims 1, 5-8, 12-14, 18, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch. Claims 1 and 18 are the independent claims of this group. Each of claims 1 and 18 recites a message alert and retrieval device that is operably connected to a dialing interface, and that has a light responsive to a message waiting signal generated by a call management interface. As indicated in the pending specification, the call management interface is a system (such as part of a private branch exchange or a telephone switching station) that can interpret control signals from the telephone set. Thus, the call management interface is part of a system that is apart and remote from the telephone itself. As with the features discussed above, by keeping the call management interface on a central system, such as a PBX, the claimed telephone set can be implemented with less complexity and cost.

Light
Neither Numakura nor Welch teaches in any manner the presence of light that is responsive to a message waiting signal generated by a call management interface. Rather, in Welch, a light is powered from a local telephone answering machine ("TAM") system; this again underscores the complexity that is required to make the Welch system work. Likewise, in Numakura, the registration information (caller name and number) is stored locally to the telephone (in recorder 5), and is not accessed using a call management interface.

Also, neither reference discloses a message key that emits light and has a distinct visual impression from its adjoining keys, as recited in claim 1 and claim 18. Rather, Numakura simply shows a button and an "accessoried" light, but does not show a button that emits light, as is discussed above. For its part, Welch merely shows a button that is the same size and shape as its

adjoining buttons. In fact, Welch refers to its group of buttons as an "array," which denotes that they are a group of similar objects—not visually distinct objects.

Moreover, even if one were to assume that the inventions of pending claims 1 and 18 could be pieced together from what is disclosed in Numakura and Welch, the Examiner has provided no evidence of a motivation to combine the two references. The Office Action merely notes that modifying Numakura with Welch "would have clarified the teaching of Numakara." But the fact that Numakura is unclear points *away from*, not toward, any conclusion of obviousness here. Also, there is nothing in Welch or Numakura that would lead a person of ordinary skill to combine the references so as to achieve one of the inventions in pending claims 1 or 18. Moreover, the inventions of claims 1 and 18 would not have merely resulted as a matter of design choice, as asserted in the Office Action. Rather, as indicated above, the inventions of claims 1 and 18 provide advantages over anything that is disclosed in either Welch or Numakura.

The dependent claims of this group differ even more from Welch and Numakura. For example, claim 5 recites that the call management interface comprises a PBX. As noted above, neither Welch nor Numakura discloses any sort of call management interface that provides messages, let alone a PBX interface. The Office Action asserts that "the switching system is inherently a [PBX]," but it fails to identify which system (Welch or Numakura) inherently uses a PBX. Also, inherency requires that the missing explicit disclosure (here, a PBX) *necessarily* be present, and there is nothing that indicates that Numakura or Welch necessarily must be used with a PBX system rather than some other sort of system. *See Scaltech, Inc. v. Retec/Tetra, LLC.*, 178 F.3d 1378, 1384, 51 USPQ2d 1055, 1059 (Fed. Cir. 1999) (an inherent limitation is one that is necessarily present, and is not established by "probabilities or possibilities.").

Also, dependent claim 21 recites that the message key has a visibly different shape than its adjoining keys. In Welch, every button is round. In Numakura, every button is rectangular. Thus, neither reference shows a button that is different in shape from its adjacent buttons. Rather, the Office Action's selection of a round key from one reference and a square key from a different reference uses insight gained from the Applicant's claimed invention in a improper hindsight analysis. *See In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998) ("[T]he suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness."). There simply is no motivation to combine the references in

this manner, and in fact, the references teach away because each shows arrangements in which every button (not just the buttons adjacent to a dialing button) is the same shape.

For each of these reasons, claims 1, 5-8, 12-14, 18 and 21 recite patentable inventions, and the Applicant respectfully requests their prompt allowance.

Rejection of claims 2-4 under 35 U.S.C. § 103

The Examiner rejected claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kanzawa (U.S. Patent No. 5,535,262). As an initial matter, each of these claims depends on claim 1, and for the reasons discussed above for claim 1, they each recite a patentable invention.

Claim 2 adds to claim 1 the recitation that the message retrieval control signal comprises a predetermined series of dialing digits, while claim 3 further adds a memory that corresponds to the dialing digits, and claim 4 further adds a CPU connected to the dialing interface, the memory, and the call management interface. Thus, each of these claims recites that the message retrieval control signal comprises a predetermined series of dialing digits (such as a telephone number or telephone extension number).

Kanzawa fails to cure the deficiencies in Numakura and Welch for at least two reasons. First, Kanzawa merely describes a system for recording telephone conversations (such as portions of an ongoing telephone call with another party); it does not deal with retrieval of messages, such as in a voice mail system, and it distinguishes voice mail systems in the Background of the Invention. Kanzawa says nothing about message retrieval, and is concerned with an entirely different problem than the Applicant's invention or any of the prior art, and thus could not suggest a solution to the problem to which Applicant's claims are addressed.

Second, Kanzawa does not teach that function key 25, if pressed, sends a signal that comprises a predetermined series of dialing digits. Even the Office Action only asserts that pushing the key generates a "message retrieval request," but fails to point to any indication that the supposed request (which actually is not a message retrieval request, as is discussed above and in Applicant's previous response) in any way generates a series of dialing digits.

Moreover, no motivation has been identified to alter or combine any of the references so as to produce the claimed invention, even though motivation to combine is an explicit

requirement in any obviousness analysis. *See, e.g., In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002); *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). Rather, the conclusion has simply been reached that it would have been obvious to modify Wakako in one way or the other. Thus, the references fail to teach each of the limitations of the pending claims, and they further fail to provide a motivation to modify any reference or combine multiple references.

For each of these reasons, the Applicant respectfully requests reconsideration of the rejections.

Rejection of claims 9 and 10 under 35 U.S.C. § 103

The Examiner rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Burgess (U.S. Patent No. 6,031,465). Claim 9 depends on claim 1, and adds that the message key comprises a touch-sensitive button. Claim 10 also depends on claim 1, and adds that the message key comprises a membrane switch. As an initial matter, because both claims depend on claim 1, they are patentable for the reasons identified above.

Both claims are also patentable because Burgess fails entirely to fill the gaps left by Welch and Numakura. In particular, Burgess involves a non-analogous area of art, and fails even to address the same or a similar problem as the present invention (or any of the other cited references). Burgess himself describes his challenge as the "problem of keyless entry." Given this clear statement, the Applicant cannot understand how an artisan of ordinary skill in the pending telephone inventions would even look to the Burgess system for any teaching. *See Jurgens v. McKasy*, 927 F.2d 1552, 18 USPQ2d 1031 (Fed. Cir. 1991) (noting that nonanalogous art "has no bearing on the obviousness of the patent claim.").

In addition, no motivation has been identified in any of the references to make a combination or to modify one of the references so as to form the invention of claims 9 or 10. The Examiner's statement that the references teach that the "message button *could* be a membrane one," (*see* Office Action, at 11), does not indicate that there is any motivation that the buttons *should be* modified in any way or combined with Burgess. There simply is no motivation to combine these three references which are in wholly disparate fields.

The Applicant therefore respectfully requests reconsideration of the rejections.

Rejection of claims 11 and 17 under 35 U.S.C. § 103

The Examiner rejected claims 11 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kavanaugh et al. (U.S. Patent No. 6,223,233). Claim 11 depends on claim 1, and adds that the message key comprise a graphical icon. Claim 17 also depends on claim 1, and adds that the light source comprises a liquid crystal display element. As an initial matter, because both claims depend on claim 1, they are patentable for the reasons identified above.

Both claims are also patentable because Kavanaugh fails to provide the other teachings that are missing from Numakura and Welch. In particular, Kavanaugh simply shows a "Wallet for Personal Information Device," and has nothing to do with retrieving messages in a telephone system. It is, therefore, nonanalogous (and therefore irrelevant) art. *See Jurgens v. McKasy*, 927 F.2d 1552, 18 USPQ2d 1031 (Fed. Cir. 1991). In addition, no motivation has been shown in the Office Action to modify Numakura or Welch (even if they were assumed to disclose the other claim limitations) using the teachings of Kavanaugh. Again, the rejection appears to involve a hindsight analysis that uses the teachings of the pending application as a guide to combine the various references.

The Applicant therefore respectfully requests reconsideration of the rejections.

Rejection of claim 15 under 35 U.S.C. § 103

The Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Charlier (U.S. Patent No. 5,153,590). Claim 15 depends on claim 1, and adds that the light source comprises an LED and light pipe assembly. As with the previous references, because this claim depends on claim 1, the Applicant submits that it defines a patentable invention, for the reasons discussed above. Also, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the references, let alone combine them so as to achieve the invention of pending claim 15.

The Applicant therefore respectfully requests reconsideration of the rejection.

Rejection of claim 16 under 35 U.S.C. § 103

The Examiner rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Akiyama (U.S. Patent No. 5,153,906). Claim 16 depends on claim 1, and adds that the light source comprises a matrix display assembly. As with the previous references, because this claim depends on claim 1, the Applicant submits that it defines a patentable invention, for the reasons discussed above. In addition, Akiyama's matrix display deals only with the label (61) that might be applied *adjacent to* a speed-dial button (62), but says nothing about using a matrix as part of the button itself. The use of a persistent label (i.e., one that continuously displays the name of a person) does not suggest the use of a matrix display to indicate the occurrence of a non-persistent event (e.g., the arrival of a voice mail message). Also, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the references, let alone combine them so as to achieve the invention of pending claim 16.

The Applicant therefore respectfully requests reconsideration of the rejection.

Rejection of claims 22 and 23 under 35 U.S.C. § 103

The Examiner rejected claims 22 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Sakayori (Japanese Patent No. 5-022428). Claim 22 depends on claim 1, and adds that the message key is spaced from adjoining keys by a distance that differs from each adjoining key and its corresponding next adjoining key. Claim 23 also depends on claim 1, and adds that the message key is spaced from at least one adjoining key by a distance that differs from the distance between the adjoining key and its next adjoining key. As such, both claims call for a message key that stands out visually at least in part because of its location and spacing relative to other keys in the telephone set.

As with the previous references, because this claim depends on claim 1, the Applicant submits that it defines a patentable invention, for the reasons discussed above. In addition, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the references, let alone combine them so as to achieve the inventions of pending claims 22 and 23. For example,

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Sakayori attaches no significance to the arrangement or spacing of its various buttons, and even appears to provide equal spacing between all of its buttons. Thus, an artisan of ordinary skill would have no reason to look to Sakayori to cure the defects in the the other references.

The Applicant therefore respectfully requests reconsideration of the rejection.

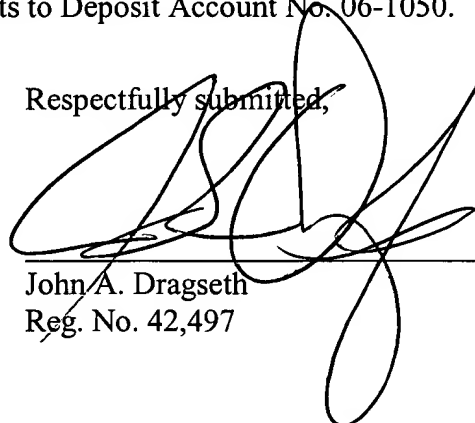
In view of the above, reconsideration and withdrawal of the cited rejections are requested, and allowance of claims 1-23 at an early date is solicited.

If questions remain regarding the above, please contact the undersigned.

Attached is a marked-up version of the changes being made by the current amendment.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

A large, stylized handwritten signature in black ink, likely belonging to John A. Dragseth, is written over a horizontal line.

John A. Dragseth
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Version with markings to show changes made

In the claims:

Claims 20, 22, and 23 have been amended as follows:

--20. (Twice amended.) A telephone comprising:
a message indicator light; [and]
a message access key, wherein the light is integrated with the key, the key comprising
an upper surface that is substantially exclusively transparent [whose substantial entirety emits
light from the message indicator light];
a dialing keypad spaced apart from the message access key; and
a telephone transceiver that provides audible access to one or more messages stored
on a central voice messaging system located remotely from the telephone.

22. (Amended.) The telephone set of claim 1, wherein the message key is spaced
apart from each of [its] one or more adjoining keys by a distance that differs from the spacing
between each of the one or more [the] adjoining keys and a [its] next adjoining key of each of the
one or more adjoining keys.

23. (Amended.) The telephone set of claim 1, wherein the message key is spaced
apart from [at least one of its adjoining keys] a first key adjoining the message key by a distance
that differs from [the] a distance between the [adjoining] first key and [its next adjoining] a
second key adjoining the first key.--

PENDING CLAIMS:

1. A telephone set comprising:
 - a) a housing;
 - b) a dialing interface mounted in the housing, the dialing interface being in communication with a call management interface;
 - c) a plurality of dialing keys operably connected to the dialing interface; and
 - d) a message alert and retrieval device, comprising a message key operably connected to the dialing interface, and a light source that causes emission of a visible light from the message key, wherein the dialing interface generates a message retrieval control signal in response to activation of the message key, and wherein the light source is responsive to a message waiting signal generated by the call management interface,
the message key having a distinct visual impression, apart from its emission of visible light, compared to its adjoining keys.
2. The telephone set of claim 1, wherein the message retrieval control signal comprises a predetermined series of dialing digits.
3. The telephone set of claim 2, further comprising a memory in operable connection with the dialing interface, wherein the memory stores data corresponding to the predetermined series of dialing digits for initiating the message retrieval control signal.
4. The telephone set of claim 3, further comprising a central processing unit operably connected to the dialing interface, the memory, and the call management interface.
5. The telephone set of claim 1, wherein the call management interface comprises a private branch exchange.
6. The telephone set of claim 1, wherein the dialing interface generates a dual tone multifrequency signal.
7. The telephone set of claim 1, wherein the telephone set and the call management interface are connected by a telephone line.

8. The telephone set of claim 1, wherein the message key comprises one of the plurality of dialing keys.

9. The telephone set of claim 1, wherein the message key comprises a touch-sensitive button.

10. The telephone set of claim 1, wherein the message key comprises a membrane switch.

11. The telephone set of claim 1, wherein the message key comprises a graphical icon.

12. The telephone set of claim 1, wherein the light source is located directly beneath the message key.

13. The telephone set of claim 1, wherein the light source comprises a light emitting diode.

14. The telephone set of claim 13, wherein the light emitting diode is mounted below an upper surface of the message key.

15. The telephone set of claim 1, wherein the light source comprises a light emitting diode and a light pipe assembly.

16. The telephone set of claim 1, wherein the light source comprises a matrix display assembly.

17. The telephone set of claim 1, wherein the light source comprises a liquid crystal display element.

18. A telephone set, comprising:

- a) a housing;
- b) a dialing interface mounted in the housing;

c) a plurality of dialing keys attached to the housing and operably connected to the dialing interface;

d) a transceiver electrically connected to the dialing interface and in communication with a call management interface;

e) a message alert and retrieval device attached to the housing, comprising a message key operably connected to the dialing interface, and a light source that causes emission of a visible light from the message key, wherein the dialing interface generates a message retrieval control signal in response to activation of the message key, and wherein the light source is responsive to a message waiting signal generated by the call management interface and received through the transceiver;

f) a transmitter attached to the housing and electrically connected to the transceiver; and

g) a receiver attached to the housing and electrically connected to the transceiver, the message key presenting a distinct visual impression, apart from its emission of visible light, compared to its adjoining keys.

19. A message indicator for a telephone, the message indicator comprising:
a light source that emits light when a message is waiting,
a first key that, when manipulated by a user of the telephone, causes transmission of a message retrieval signal, and
a plurality of additional keys, wherein one or more of the additional keys is located adjacent to the first key, and the first key is visually distinct from its adjacent keys other than by its emission of light, and
wherein the light source is physically integrated with the key.

20. A telephone comprising:
a message indicator light;
a message access key, wherein the light is integrated with the key, the key comprising an upper surface that is substantially exclusively transparent;
a dialing keypad spaced apart from the message access key; and
a telephone transceiver that provides audible access to one or more messages stored on a central voice messaging system located remotely from the telephone.

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21. The telephone set of claim 1, wherein the message key has a visibly different shape than its adjoining keys.

22. The telephone set of claim 1, wherein the message key is spaced apart from each of one or more adjoining keys by a distance that differs from the spacing between each of the one or more adjoining keys and a next adjoining key of each of the one or more adjoining keys.

23. The telephone set of claim 1, wherein the message key is spaced apart from a first key adjoining the message key by a distance that differs from a distance between the first key and a second key adjoining the first key.